

Application No. 08/480,684
Amendment dated September 10, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (original) A device for insertion between two boney structures for maintaining spacing and facilitating bone fusion comprising:
 - an elongated body having an outer surface extending along a longitudinal axis between a distal end and a proximal end;
 - a helical thread pattern formed around at least a portion of said elongated body and defining a forward insertion rotation direction and a backward unscrewing rotation direction; and
 - means for impaling adjacent bone structures to resist backward rotation of said elongated body once it is inserted into bone.
2. (new) A tool for use in implanting an intervertebral joint prosthesis, comprising:
 - an elongated handle portion;
 - a prosthesis engaging portion connected to said handle portion for holding the prosthesis; and
 - means connected to said prosthesis engaging portion for retaining the prosthesis in engagement with said prosthesis engaging portion.
3. (new) The tool of claim 2, wherein said prosthesis engaging portion further includes a plurality of apertures.
4. (new) The tool of claim 3, wherein said prosthesis engaging portion includes a prosthesis engaging surface for maintaining the prosthesis in a predetermined orientation.
5. (new) The tool of claim 4, wherein said prosthesis engaging surface includes a flange.
6. A fusion device for facilitating arthrodesis in a disc space between adjacent vertebrae, comprising:
 - an elongate body having a length and including a pair of oppositely

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disposed arcuate side walls extending along said length and adapted for engagement with the adjacent vertebrae, said arcuate side walls defining external threads extending substantially entirely along said length, said elongate body at least partially formed of a porous biocompatible material to permit bone tissue ingrowth into said arcuate side walls.

7. The fusion device of claim 6, wherein said elongate body has a hollow interior and at least one opening in communication with said hollow interior.
8. The fusion device according to claim 7, further comprising a bone growth inducing material disposed within said hollow interior.
9. The fusion device of claim 7, wherein said at least one opening extends through a corresponding one of said arcuate side walls.